Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



Interior Least Tern

Sterna antillarum athalassos

Common name • Interior Least Tern
Scientific name • Sterna antillarum athalassos
Federal status • Endangered
State status • Endangered

Ecology

In Missouri, interior least terns historically nested on sandbar islands in major rivers but are now restricted to several islands on the lower Mississippi River. Migratory least terns occur in Missouri from May through August. They nest in small colonies, usually comprised of 10-12 pairs, typically in sand or gravel areas with sparse or no vegetation and well back from the water line. They also nest on sand or gravel pits and shorelines of lakes and reservoirs. Females lay eggs mostly in May and June, with renesting (if first eggs are lost) occurring in July or August. Incubation lasts 20-25 days and young leave the nest a few days after hatching, finding places to hide nearby. Young fly about 3-4 weeks later and may remain with parents another 2-3 months. They usually leave the nesting colony sometime in early September. Interior least terns forage along shorelines, sandbar margins, backwaters, and chutes usually within a few hundred meters of the nesting colony. Their diet consists almost entirely of small fish, primarily minnows.

Reasons for Decline

Least terns were nearly exterminated by plume hunters at the turn of the century, with a typical seasonal kill of 100,000 birds. Nest depredation by cats and rats often causes colony desertion. In addition, habitat has been decimated by extensive water management projects and increased human use of beaches and sandbars. Dams above colonies generally lower habitat quality by eliminating the spring floods that are necessary for alluvium deposition and the scouring of vegetation, or sometimes extending high-water conditions into the nesting season. This modification of river flow by humans (e.g., reduction of spring floods by dams) and bank stabilization and channelization has resulted in reduced bare island/sandbar nesting habitat. Loss of aquatic habitat diversity and resulting changes in fish species composition and abundance also may have contributed to the reduced interior least tern population.

Specific Recommendations

Sandbars, the preferred nesting substrate, are generally not stable features of the natural river landscape. Rather, they are created, enlarged, destroyed, or flooded depending on the dynamics of the river, so it is crucial that water stabilization projects be modified on rivers with potential nesting habitat for interior least terns. In addition, because nesting colonies may move from year to year as available habitat changes, it is important to protect potential nesting sites, as well as existing ones.

- → River systems inhabited by interior least terns should be protected from dams and other hydrological developments.
- \rightarrow River flows should be maintained to create and isolate breeding habitat.
- ightarrow Shallow-water feeding grounds also should be maintained, and active breeding colonies should be protected from human intrusion.
- → Human activity, especially with vehicles, should be avoided on sandbars from May through August.
- → Snow fencing effectively provides shade for chicks and protection from predators.

General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

Information Contacts

For further information on construction projects in rivers and streams, contact:

Missouri Department of Conservation Policy Coordination Section P.O. Box 180 2901 W. Truman Blvd Jefferson City, MO 65102-0180 Telephone: 573/751-4115

Missouri Department of Natural Resources Division of Environmental Quality P.O. Box 176 Jefferson City, MO 65102-0176 Telephone: 573/526-3315

> U.S. Army Corps of Engineers Regulatory Branch 700 Federal Building Kansas City, MO 64106-2896 Telephone: 816/983-3990

U.S. Environmental Protection Agency Water, Wetlands, and Pesticides Division 901 North 5th Street Kansas City, KS 66101 Telephone: 913/551-7307

> U.S. Fish and Wildlife Service Ecological Services Field Office 608 E. Cherry Street, Room 200 Columbia, MO 65201 Telephone: 573/876-1911

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